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(REV. 1-2000)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTORNEY'S DOCKET NUMBER
54334-00003USPXTRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371

U.S. APPLICATION NO. 09/980755

INTERNATIONAL APPLICATION NO.
PCT/NO00/00153INTERNATIONAL FILING DATE
May 9, 2000PRIORITY DATE CLAIMED
May 11, 1999

TITLE OF INVENTION

COMPUTER MOUSE WITH PENCIL GRIP

APPLICANT(S) FOR DO/EO/US

Kjell NEDREGAARD

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)) (signed)
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern other document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A FIRST preliminary amendment.
14. ☐ A SECOND or SUBSEQUENT preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13.2 and 35 U.S.C. 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information:

COPY OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT;
 COPY OF THE INTERNATIONAL SEARCH REPORT PREPARED BY THE SWEDISH PATENT OFFICE;
 COPY OF THE PCT REQUEST FOR PROCESSING THE APPLICATION ACCORDING TO THE PCT; AND
 CONFIRMATION POSTCARD.

09/980755-11001

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.50)		INTERNATIONAL APPLICATION NO. PCT/NO00/00153		ATTORNEY'S DOCKET NUMBER 54334-00003USPX	
09/980755					
17. <input checked="" type="checkbox"/> The following fees are submitted:				CALCULATIONS	
Basic National Fee (37 CFR 1.492(a)(1)-(5)):				PTO USE ONLY	
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO					
International preliminary examination fee NOT paid to USPTO but International Search Report prepared by the EPO or JPO					
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search fee (37 CFR 1.445(a)(2)) paid to USPTO					
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)					
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4)					
ENTER APPROPRIATE BASIC FEE AMOUNT =				\$ 1040	
Surcharge of \$130.00 for furnishing the oath or declaration later than 20 30 months from the earliest claimed priority date (37 CFR 1.492(e)).					
Claims		Number Filed	Number Extra	Rate	
Total Claims		3 - 20 =	0	x \$18.00	\$ 0
Independent Claims		1 - 3 =	0	x \$84.00	\$ 0
Multiple dependent claims(s) (if applicable)		Yes		+ \$280.00	\$ 280
TOTAL OF ABOVE CALCULATIONS =				\$ 1320	
Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28).				\$ 660	
SUBTOTAL =				\$ 660	
Processing fee of \$130.00 for furnishing the English translation later the 20 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
TOTAL NATIONAL FEE =				\$ 660	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
TOTAL FEES ENCLOSED =				\$ 660	
				Amount to be: refunded \$	
				charged \$	
a. <input checked="" type="checkbox"/> A check in the amount of \$ 660 to cover the above fees is enclosed.					
b. <input type="checkbox"/> Please charge my Deposit Account No. 10-0447 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 10-0447. A duplicate copy of this sheet is enclosed.					
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO:					
Stanley R. Moore, Esq. Jenkins & Gilchrist, P.C. 3200 Fountain Place 1445 Ross Avenue Dallas, Texas 75202-2799 214/855-4500					
23932		SIGNATURE Stanley R. Moore			
PATENT TRADEMARK OFFICE		NAME			
		26,958			
		REGISTRATION NUMBER			

Computer Mouse with Pencil Grip.

The invention *computer mouse with pencil grip* refers to a computer mouse, which is used as a pointing tool in connection with the use of a personal computer (PC).

A steadily increasing number of people suffer from repetitive stress injuries in arm, shoulder and/or the neck region as a consequence of using a computer mouse in connection with the use of a PC/computer. In addition to causing suffering and problems for the user, these repetitive stress injuries result in economic losses for companies and society. One of the main reasons for why so many people get repetitive stress injuries when using a computer mouse, is the ergonomic design(s) of the state of the art computer mouse. The use of a computer mouse requires finely tuned movements. The design of a traditional computer mouse is such that controlling it requires using parts of the arm muscles, which are developed for more coarsely tuned movements. This results in a consistent high muscle tension (static muscle movement), not only in the part of the arm conducting the movement itself, but also in the adjacent muscles in the arm, shoulder and neck. The reason for this is the need to stabilise the movements so that necessary precision is obtained. This applies both to the traditional computer mouse, where the palm of the hand partly covers the computer mouse and the right and left mouse buttons are controlled by the pointing- and mid finger, respectively, and for computer mice with "joystick" or "pistol grip" design.

There is currently one known computer-pointing device (US 5 343 594) which is controlled by way of a pencil grip. This computer-pointing device does, however, have one operational weakness in that it cannot stand in an operative position when it is not in use. It either has to be picked up from the surface (desk) or from a holding device, and then be placed in an operative position before the user can resume working.

Computer mouse with pencil grip, according to the invention, combines the ergonomic benefits of the pencil grip with the operational benefits of the traditional computer mouse in that it is constantly in an operative position, as specified in claim 1. This is obtained, according to the invention, by adding a pencil-like shaft with control buttons to the posterior part of the body of the traditional mouse. *Computer mouse with pencil grip* therefore stands in an operative position with the pencil shaft tilted slightly backwards in relation to the body of the mouse also when it is not being operated. With *computer mouse with pencil grip* according to the invention, the user can, in a similar manner as when using a traditional computer mouse, swiftly and easily change between operating the computer keyboard and the computer-pointing device. The invention is otherwise based on known technology used in other types of computer-pointing devices.

An example of a possible design of *computer mouse with pencil grip* according to the invention is shown in Figure 1., seen straight from the front and from the side.

The control buttons (1) and (2) on the *computer mouse with pencil grip* are placed on the lower part of the pencil shaft (3), which is placed on the posterior part of the mouse body (4) and tilted slightly backwards. This enables the *computer mouse with pencil grip* to be operated by a normal pencil grip.

Computer mouse with pencil grip is designed in such a way that it stands in an operative position when not in use. This enables a swift and easy change for the user in operating the computer keyboard and the computer-pointing device.

Computer mouse with pencil grip thus combines the ergonomic benefits of the pencil grip with the operational benefits of the traditional computer mouse in that it is in an operative position also when not in use.

Computer mouse with pencil grip can also be supplied with other control buttons, for example a so-called scroll function, by which the screen can be rolled upwards, downwards or sideways.

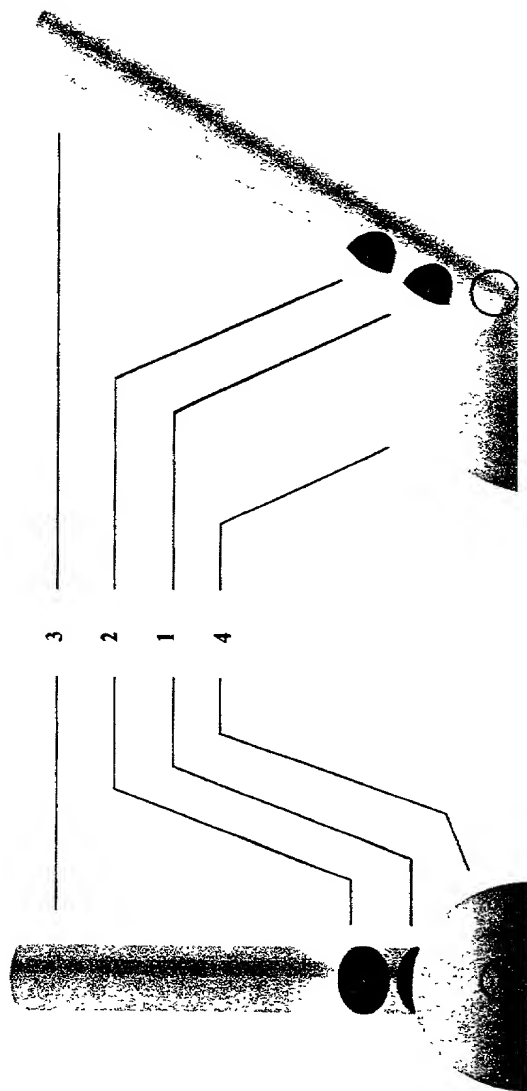
Computer mouse with pencil grip, according to the invention, is operated by holding the mouse in a normal pencil grip around the pencil shaft (3) and moving it around on a mouse pad in the same manner as when using a traditional computer mouse. The technology which controls the movement of the pointing device on the screen, can be the same as in a traditional computer mouse or similar technology. Signal transmission from *computer mouse with pencil grip* to the computer can be conducted in a similar manner as with a traditional computer mouse via a cord or by using technology for cordless signal transmission.

Claims

1. *Computer mouse with pencil grip* is characterised in that the control buttons, e.g. resembling right and left mouse buttons on a traditional computer mouse (1,2), are placed on the lower part of a pencil shaft (3) which is tilted slightly backwards from the posterior part of the mouse body (4) and that its weight is balanced so that it is maintained in an operative position also when not in use.
2. *Computer mouse with pencil grip* according to claim 1, characterised in that the thickness/height of the computer mouse in the area where the pencil shaft is attached to the mouse is not thicker /higher than that it is possible for the user to hold a normal pencil grip around the pencil shaft (4) and at the same time rest the underarm and the side of the hand against the surface (desk).
3. *Computer mouse with pencil grip* according to claims 1-2, characterised in that the diameter and length of the pencil shaft is such that it gives a comfortable and stable pencil grip when being operated.

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Figure 1.



- 1. Lower control button
- 2. Upper control button
- 3. Pencil shaft
- 4. Mouse body

RULES 63 AND 67 (37 C.F.R. 1.63 and 1.67)
DECLARATION AND POWER OF ATTORNEY

FOR UTILITY/DESIGN/CIP/PCT NATIONAL APPLICATIONS

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; and

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: , the specification of which: (mark only one)

- | | | |
|----------|-----|---|
| <u>X</u> | (a) | is attached hereto. |
| — | (b) | was filed on _____ as Application Serial No. _____ and was amended on _____ (if applicable) |
| — | (c) | was filed as PCT International Application No. PCT/_____ on _____ and was amended on _____ (if applicable). |
| — | (d) | was filed on _____ as Application Serial No. _____ and was issued a Notice of Allowance on _____. |
| — | (e) | was filed on _____ and bearing attorney docket number _____ |

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above or as allowed as indicated above.

I acknowledge the duty to disclose all information known to me to be material to the patentability of this application as defined in 37 CFR ' 1.56. If this is a continuation-in-part (CIP) application, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. ' 112, I acknowledge the duty to disclose to the Office all information known to me to be material to patentability of the application as defined in 37 CFR ' 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

I hereby claim foreign priority benefits under 35 U.S.C. ' 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate filed by me or my assignee disclosing the subject matter claimed in this application and having a filing date (1) before that of the application on which my priority is claimed or, (2) if no priority is claimed, before the filing date of this application:

**PATENT
DOCKET NUMBER
54334-00003**

PRIOR FOREIGN PATENTS

Number	Country	Month/Day/Year Filed	Date first laid- open or Published	Date patented or Granted	Priority Claimed	
					Yes	No
1999 2291	Norway	May 11, 1999			X	

I hereby claim the benefit under 35 U.S.C. 120/365 of any United States application(s) listed below and PCT international applications listed above or below:

PRIOR U.S. OR PCT APPLICATIONS

Application No. (series code/serial no.)	Month/Day/Year Filed	Status (pending, abandoned, patented)
PCT/NO00/00153	May 9, 2000	

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all of the firm of **JENKENS & GILCHRIST**, a Professional Corporation, 1445 Ross Avenue, Suite 3200, Dallas, Texas 75202-2799, as my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application, provisionals thereof, continuations, continuations-in-part, divisionals, appeals, reissues, substitutions, and extensions thereof and to transact all business in the United States Patent and Trademark Office connected therewith, to appoint any individuals under an associate power of attorney and to file and prosecute any international patent application filed thereon before any international authorities, and I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization who/which first sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct them in writing to the contrary.

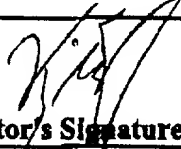
PATENT
DOCKET NUMBER
54334-00003

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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(FOR ADDITIONAL INVENTORS, check here ___ and add additional sheet for inventor information regarding signature, name, date, citizenship, residence and address)